

ABSTRACT OF THE DISCLOSURE:

An encased stent that discourages restenosis by having a homogenous endothelial cell lining along the inner wall of the stent. The endothelial cell lining may be coated on the stent before the stent is placed in the artery, or the endothelial cell lining may be grown after placement by several factors that encourage such growth and discourage restenosis. The endothelial cells to coat the stent may be genetically modified to enhance the growth of the endothelial cells into a homogeneous lining. The stent has a continuous lining in the form of a multi-layer polymer coating, including a conducting biocorrosion inhibiting layer and a continuous film of polyurethane coupled by a coupling agent to polyethylene glycol. Various drugs and cell factors may be incorporated into the lining, such as anti-thrombin, anti-inflammatory and anti-coagulant drugs, cell cycle inhibitors, and vascular endothelial growth factors.